

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. - 12. (Canceled)

13. (Currently Amended) A method of delivering fluid to multiple patients, comprising:

- (a) providing a fluid delivery system comprising a reusable portion fluid path and a plurality of per-patient disposable ~~portions~~ fluid paths, the reusable portion fluid path including
 - (i) a first fluid source;
 - (ii) a second fluid source;
 - (iii) a device adapted to mix fluids from the first and second fluid sources, the plurality of per-patient disposable ~~portions~~ fluid paths each including a first end connectable to a patient of the multiple patients and a second end connectable to the reusable portion fluid path;
- (b) connecting the second end of a first per-patient disposable portion fluid path of the plurality of per-patient disposable ~~portions~~ fluid paths to the reusable portion fluid path and the first end of the first per-patient disposable portion fluid path to a first patient of the multiple patients to define a fluid path between the first and second fluid sources and the first patient;
- (c) mixing the fluids from the first and second fluid sources to create a first mixture with a predetermined content for the first patient;
- (~~e~~) (d) ~~selectively delivering fluid from one or both of the first and second fluid sources~~ the first mixture to the first patient through the first per-patient disposable ~~portion~~ fluid path;
- (~~d~~) (c) disconnecting the first per-patient disposable portion fluid path from the reusable portion fluid path and the first patient;

(e) (f) connecting a second per-patient disposable ~~portion~~ fluid path to the reusable ~~portion~~ fluid path and a second patient of the multiple patients; and

(g) mixing the fluids from the first and second fluid sources to create a second mixture with a predetermined content for the second patient; and

(f) (h) selectively delivering fluid from one or both of the first and second fluid sources the second mixture to the second patient through the second per-patient disposable ~~portion~~ fluid path.

14. (Currently Amended) The method of claim 13, wherein the reusable ~~portion~~ fluid path further comprises at least one metering device disposed between the first and the second fluid sources.

15. (Previously Presented) The method of claim 14, further comprising a control device in communication with the metering device.

16. (Currently Amended) The method of claim 13, wherein the reusable ~~portion~~ fluid path further comprises a fluid assurance device.

17. (Previously Presented) The method of claim 13, wherein the first fluid source comprises a contrast source.

18. (Previously Presented) The method of claim 13, wherein the second fluid source comprises a diluent source.

19. – 62. (Canceled)

63. (Previously Presented) The method of claim 13, wherein the device adapted to mix comprises a static mixer.

64. (Previously Presented) The method of claim 13, wherein the device adapted to mix comprises a Y element.
65. (Previously Presented) The method of claim 14, wherein the at least one metering device comprises a peristaltic pump.
66. (Canceled)
67. (Currently Amended) The method of claim 13, wherein the ~~selective~~ delivery of ~~fluid from one or both of the first and second fluid sources at least one of either the first or second mixture~~ comprises the use of a rotary valve switch to select the delivery of fluids to a patient of the multiple patients.
68. (Previously Presented) The method of claim 13, wherein the device adapted to mix comprises a helical vane mixer.
69. (Currently Amended) The method of claim 13, wherein the reusable ~~portion~~ fluid path further comprises a pressurizing pump.
70. (Previously Presented) The method of claim 15, further comprising a user interface connected to the control device.
71. (Previously Presented) The method of claim 15, further comprising an electronic interface connecting the control device to a hospital information system.
72. (Currently Amended) A method of delivering fluid to multiple patients, comprising:

(a) providing a fluid delivery system comprising a reusable portion fluid path and a plurality of per-patient disposable portions fluid paths, the reusable portion fluid path including

- (i) a first fluid source;
- (ii) a second fluid source; and
- (iii) a Y element adapted to mix fluids from the first and second fluid sources,

the plurality of per-patient disposable portions fluid paths each including a first end connectable to a patient of the multiple patients and a second end connectable to the reusable portion fluid path;

(b) connecting the second end of a first per-patient disposable portion fluid path of the plurality of per-patient disposable portions fluid paths to the reusable portion fluid path and the first end of the per-patient disposable portion fluid path to a first patient of the multiple patients to define a fluid path between the first and second fluid sources and the first patient;

(c) mixing the fluids from the first and second fluid sources to create a first mixture with a predetermined content for the first patient;

(e) (d) selectively delivering the first mixture fluid from one or both of the first and second fluid sources to the first patient through the first per-patient disposable portion fluid path;

(d) (e) disconnecting the first per-patient disposable portion fluid path from the reusable portion fluid path and the first patient;

(e) (f) connecting a second per-patient disposable portion fluid path to the reusable portion fluid path and a second patient of the multiple patients; and

(g) mixing the fluids from the first and second fluid sources to create a second mixture with a predetermined content for the second patient; and

(f) (h) selectively delivering the second mixture fluid from one or both of the first and second fluid sources to the second patient through the second per-patient disposable portion fluid path.

73. (Currently Amended) The method of claim 72, wherein the reusable ~~portion~~ fluid path further comprises at least one metering device disposed between the first and second fluid sources and the Y element.

74. (Previously Presented) The method of claim 73, further comprising a control device in communication with the metering device.

75. (Currently Amended) The method of claim 72, wherein the reusable ~~portion~~ fluid path further comprises a fluid assurance device.

76. (Previously Presented) The method of claim 72, wherein the first fluid source comprises a contrast source.

77. (Previously Presented) The method of claim 72, wherein the second fluid source comprises a diluent source.

78. (Previously Presented) The method of claim 73, wherein the at least one metering device comprises a peristaltic pump.

79. (Canceled)

80. (Currently Amended) The method of claim 72, wherein the reusable ~~portion~~ fluid path further comprises a pressurizing pump.

81. (Previously Presented) The method of claim 74, further comprising a user interface connected to the control device.

82. (Currently Amended) A method of delivering fluid to multiple patients, comprising:

(a) providing a fluid delivery system comprising a reusable ~~portion~~ fluid path and a plurality of per-patient disposable ~~portions~~ fluid paths, the reusable ~~portion~~ fluid path including

(i) a first fluid source;

(ii) a second fluid source; and

(iii) a static mixer configured to mix the fluids from the first and second fluid sources to create a mixed fluid, the plurality of per-patient disposable ~~portions~~ fluid paths each including a first end connectable to a patient of the multiple patients and a second end connectable to the reusable ~~portion~~ fluid path;

(b) connecting the second end of a first per-patient disposable ~~portion~~ fluid path of the plurality of per-patient disposable ~~portions~~ fluid paths to the reusable ~~portion~~ fluid path and the first end of the first per-patient disposable ~~portion~~ fluid path to a first patient of the multiple patients to define a fluid path between the first and second fluid sources and the first patient;

(c) mixing the fluids from the first and second fluid sources to create a first mixture with a predetermined content for the first patient;

(e) (d) selectively delivering the first mixture fluid from one or both of the first and second fluid sources to the first patient through the first per-patient disposable ~~portion~~ fluid path;

(d) (c) disconnecting the first per-patient disposable ~~portion~~ fluid path from the reusable ~~portion~~ fluid path and the first patient;

(e) (f) connecting a second per-patient disposable ~~portion~~ fluid path to the reusable ~~portion~~ fluid path and a second patient of the multiple patients; and

(g) mixing the fluids from the first and second fluid sources to create a second mixture with a predetermined content for the second patient; and

(f) (h) selectively delivering the second mixture fluid from one or both of the first and second fluid sources to the second patient through the second per-patient disposable ~~portion~~ fluid path.

83. (Currently Amended) The method of claim 82, wherein the reusable ~~portion~~ fluid path further comprises at least one metering device.

84. (Previously Presented) The method of claim 83, further comprising a control device in communication with the metering device.

85. (Currently Amended) The method of claim 82, wherein the reusable ~~portion~~ fluid path further comprises a fluid assurance device.

86. (Previously Presented) The method of claim 82, wherein the first fluid source comprises a contrast source.

87. (Previously Presented) The method of claim 82, wherein the second fluid source comprises a diluent source.

88. (Previously Presented) The method of claim 83, wherein the at least one metering device comprises a peristaltic pump.

89. (Canceled)

90. (Currently Amended) The method of claim 82, wherein the reusable ~~portion~~ fluid path further comprises a pressurizing pump.

91. (Previously Presented) The method of claim 84, further comprising a user interface connected to the control device.

92. - 94. (Canceled)